

WHAT IS CLAIMED IS:

1. An X-ray computed tomographic apparatus,
comprising:

5 a display portion to display, on a screen,
a scanogram related to a subject together with
a quadrilateral frame line specifying a reconstruction
range;

10 an input portion to input a command to transform
the frame line specifying said reconstruction range to
a parallelogram or rotate the frame line specifying
said reconstruction range;

a scan portion to perform scanning in a scan range
corresponding to said reconstruction range; and

15 a reconstruction portion to reconstruct image data
related to plural slices, parallel to one another and
included in said reconstruction range, slice-by-slice
on the basis of projection data acquired by said
scanning.

20 2. The X-ray computed tomographic apparatus
according to claim 1, wherein:

a center line of said transformed or rotated
reconstruction range is tilted with respect to a center
line of said scan range.

25 3. The X-ray computed tomographic apparatus
according to claim 2, wherein:

a distance from the center line of said scan range
to a center of each of said plural slices varies from

slice to slice.

4. The X-ray computed tomographic apparatus according to claim 2, wherein:

5 said slices are tilted with respect to the center line of said transformed reconstruction range.

5. The X-ray computed tomographic apparatus according to claim 4, wherein:

said slices are orthogonal to the center line of said scan range.

10 6. The X-ray computed tomographic apparatus according to claim 2, wherein:

said slices are orthogonal to the center line of said rotated reconstruction range.

15 7. The X-ray computed tomographic apparatus according to claim 6, wherein:

said slices are tilted with respect to the center line of said scan range.

8. The X-ray computed tomographic apparatus according to claim 1, wherein:

20 an icon corresponding to transformation or rotation is displayed in the vicinity of the frame line specifying said reconstruction range.

9. The X-ray computed tomographic apparatus according to claim 1, wherein:

25 said scan range is set to a shape of a cylindrical column whose longitudinal cross section is an oblong having an axis of rotation at a center and covering

said transformed or rotated reconstruction range.

10. The X-ray computed tomographic apparatus according to claim 1, wherein:

5 said scan range covers said transformed or rotated reconstruction range.

11. The X-ray computed tomographic apparatus according to claim 10, wherein:

10 said scan range has a length longer than said transformed or rotated reconstruction range with respect to a direction parallel to a central axis thereof.

12. The X-ray computed tomographic apparatus according to claim 10, wherein:

15 said scan range has a width almost equal to said transformed or rotated reconstruction range with respect to a direction orthogonal to a central axis thereof.

13. A method for X-ray computed tomography, comprising:

20 displaying, on a screen, a scanogram related to a subject together with a quadrilateral frame line specifying a reconstruction range;

25 inputting a command to transform the frame line specifying said reconstruction range to a parallelogram or rotate the frame line specifying said reconstruction range;

performing scanning in a scan range corresponding

to said reconstruction range; and

reconstructing image data related to plural
slices, parallel to one another and included in said
reconstruction range, slice-by-slice on the basis of
5 projection data acquired by said scanning.

14. The method for X-ray computed tomography
according to claim 13, wherein:

a center line of said transformed or rotated
reconstruction range is tilted with respect to a center
10 line of said scan range.

15. The method for X-ray computed tomography
according to claim 14, wherein:

a distance from the center line of said scan range
to a center of each of said plural slices varies from
15 slice to slice.

16. The method for X-ray computed tomography
according to claim 14, wherein:

said slices are tilted with respect to the center
line of said transformed reconstruction range.

20 17. The method for X-ray computed tomography
according to claim 16, wherein:

said slices are orthogonal to the center line of
said scan range.

25 18. The method for X-ray computed tomography
according to claim 14, wherein:

said slices are orthogonal to the center line of
said rotated reconstruction range.

19. The method for X-ray computed tomography according to claim 18, wherein:

said slices are tilted with respect to the center line of said scan range.

5 20. The method for X-ray computed tomography according to claim 13, wherein:

an icon corresponding to transformation or rotation is displayed in the vicinity of the frame line specifying said reconstruction range.

10 21. The method for X-ray computed tomography according to claim 13, wherein:

said scan range is set to a shape of a cylindrical column whose longitudinal cross section is an oblong having an axis of rotation at a center and covering
15 said transformed or rotated reconstruction range.

22. The method for X-ray computed tomography according to claim 13, wherein:

said scan range covers said transformed or rotated reconstruction range.

20 23. The method for X-ray computed tomography according to claim 22, wherein:

said scan range has a length longer than said transformed or rotated reconstruction range with respect to a direction parallel to a central axis
25 thereof.

24. The method for X-ray computed tomography according to claim 22, wherein:

said scan range has a width almost equal to said transformed or rotated reconstruction range with respect to a direction orthogonal to a central axis thereof.